THE Canadian Hospital

A Monthly Journal for Hospital Executives

Toronto, Can. **The Edwards Publishing Company** May, 1931

HIS ISSUE—

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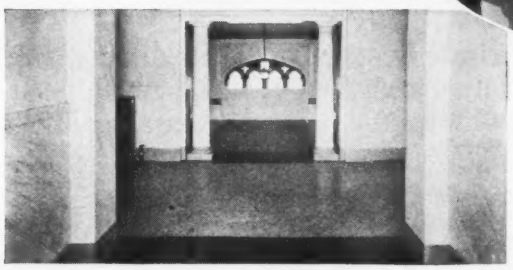

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It May Be YOUR Hospital Which Wins the Award

THE American Hospital Association cordially invites every hospital which has arranged a program for National Hospital Day, May 12, to send clippings, photographs, printed matter and other material relating to its program to the Association office, 18 East Division Street, Chicago, for consideration in the annual award of the A.H.A. certificate.

The material will be displayed at the A.H.A. convention in Toronto and will be used by the National Hospital Day Committee in determining the hospital to receive the award. Hospitals desiring to submit material should consider these suggestions: (1) The material should be enclosed in a folder or cover. (2) All clippings, photographs, printed programs, etc., should be pasted in place. (3) A summary of the hospital's program, including methods of publicity, details of program, number in attendance, etc., should be included. (4) The material should be at the office of the American Hospital Association within a month after May 12. (5) No material will be returned unless specifically requested and necessary postage enclosed. (6) Address material to "National Hospital Day Booth, American Hospital Association, 18 East Division Street, Chicago, Ill."

President Hoover again demonstrated his personal interest in the work of hospitals and in the observance of National Hospital Day, when on April 13, his busiest day since he assumed office, he granted an interview to representatives of the American Hospital Association and of the National Hospital Day Committee, in the executive suite, White House Grounds, Washington, D.C. Dr. Lewis A. Sexton, superintendent, Hartford Hospital, Hartford, Conn., president of the association, headed the A. H. A. delegation, which included the Rev. E. F. Garesche, S.J., Catholic Medical Mission Board, New York, and Matthew O. Foley, Chicago. President Hoover spent several minutes talking about the work of hospitals, and said that he would be very glad to prepare a special letter to Dr. Sexton urging the public to visit a hospital on May 12. News services carried information about the conference to newspapers throughout the continent, and a reference to the meeting was carried on part one of the New York Times and New York American, among other papers.

"Hospitals are now carrying a heavy burden," said Mr. Hoover's statement, "being pressed by ever more patients and for more free service. They are meeting the demands made upon them courageously, but this year particularly they need the co-operation and support of the public.

"It is particularly fitting to call the attention of all the people at this time to these conditions, as May 12 is National Hospital Day, a day set apart for every one to visit and become familiar with what their hospitals are doing and what they mean to their respective communities."

Investigate Before You Sign on the Dotted Line

ACCORDING to Associated Press dispatches of March 23rd the Post Office Department of the U.S.A. has issued a fraud order against a New York Company, whose activities in regard to the sale of convention proceeding transcripts are thought to bear investigation. The Department has stated that persons attending conventions often unknowingly sign slips which pledge them to purchase transcripts at so much per page, the size of the pages and their margin allowances resulting in bills totalling several hundred dollars.

A number of those who signed these purchase orders refused to honour the bills covering the manuscripts, and in some instances payment was forced by making collections through the courts. In the case of several others a compromise was arrived at in order to affect settlement.

Convention delegates are busy men and women who little think that such fraudulent tricks would be played upon them at a hospital convention. It is because of this that we refer to the misfortune of several delegates to the International Hospital Congress in Atlantic City in 1929. Although it is highly improbable that the company referred to will extend its operations to Canada during the coming American Hospital Association Convention, one cannot be too careful. Therefore our advice to all delegates is—INVESTIGATE BEFORE YOU SIGN ON THE DOTTED LINE.

Recent Abstracts Published on Costs of Medical Care

AMONG the recent abstracts published by the Committee on the Costs of Medical Care, organized several years ago to study the economic aspects of the prevention and care of sickness, including the adequacy, availability and compensation of the persons and agencies concerned, and whose headquarters are located at 910 Seventeenth Street, N.W., Washington, D.C., are the following:

"Private Group Clinics." The Administrative and Economic Aspects of Group Medical Practise, as Represented in the Policies and Procedures of 55 Private Associatons of Medical Practitioners. By C. Rufus Rorem, Ph.D., C.P.A.

"Illness and Dependency," which indicates that dependent persons are ill on the average nearly twice as often as persons with incomes considered adequate. Infant and adult mortality rates are from 1½ to 2½ times as high among the poorest groups. The expenditures for medical care alone seldom cause dependency. The interrelation of illness and dependency apparently arises from a common origin—a "complex" of environmental factors and personal characteristics. By Frank J. Bruno.

"A Survey of the Medical Facilities of the City of Philadelphia for 1929," being in part a Digest of the "Philadelphia Hospital and Health Survey, 1929." The residents of Philadelphia spent $103,759,700 in 1928 for the prevention of illness and care of the sick—nearly $54 per capita, according to this abstract. Of this total, approximately 26 per cent was paid to physicians, 13 per cent to dentists, and 6 per cent to other practitioners. Hospitals received nearly 27 per cent, drugs and medicines cost 20 per cent, and 2 per cent was spent for public health services. By Nathan Sinai, D.P.H., and Alden B. Mills.

"A Study of Physicians and Dentists in Detroit: 1929." This indicates that on the average, the 2,247 physicians of Detroit devote 57½ hours per week to their practise and receive net incomes of $4,548. The 761 dentists, on the average, devote 44 hours per week to practise and receive net incomes of $5,393. By Nathan Sinai, D.P.H., and Alden B. Mills.

Hospital administrators, physicians or others interested in studying these abstracts may acquire copies by writing the Committee on the Costs of Medical Care, 910 Seventeenth Street, N.W., Washington, D.C.

Further Information on Physiotherapy by Mrs. Graham

In this issue of The Canadian Hospital will be found a very practical article on Physiotherapy Departments in Hospitals, written by no less an authority on the subject than Enid G. Graham (Mrs. Duncan Graham), formerly Miss Enid G. Finley. At one time Mrs. Graham was lecturer on the staff of the McGill School of Physical Education, McGill University, Montreal, and later Supervising Masseuse at the Military School of Orthopedic Surgery and Physiotherapy, Hart House, Toronto, 1918-1919. At the present time she is one of the Board of Directors of the Canadian Association of Massage and Remedial Gymnastics. We recommend this article to our readers who are interested in Physiotherapy as one written with a background of practical experience rather than of hear-say.

Liverpool Hospital Cables Invitation to Canadian Delegates

The following cable was received by the Canadian Hospital on April 20th: "Anxious provide hospitality Canadian delegates to International Hospital Congress Vienna June. Please convey invitation to delegates." Signed Lamb Hospitals Council, Liverpool, England.

On behalf of our Canadian hospitals, not only of those who may be sending delegates to Vienna but of all hospitals, we thank the Lamb Hospitals Council for this much appreciated sign of goodwill and friendly feeling. We are certain that any Canadian delegates attending the Congress will make it a point to partake of the hospitality of the Council, and we would ask them to convey our greetings.

I will speak ill of no man, not even in matter of truth; but rather excuse the faults I hear charged upon others, and upon proper occasion speak all the good I know of everbody.—*Franklin's Journal.*

Should More Doctors Attend Hospital Conventions?

By DR. G. HARVEY AGNEW
Secretary, Department of Hospital Service, Canadian Medical Association

THE practice of medicine down through history has been a constantly shifting stage, a field in which our interests have been ever changing, broadening, and readjusting themselves with almost kaleidoscopic activity. As the progress of scientific development has advanced, the field of medical interest, of obligatory medical interest, has accordingly broadened. And of the many allied activities which now demand the attention of the physician, none are so worthy of his thought, none have so deeply placed him under obligation as has the hospital.

Time once was when the doctor knew not the benefits of hospital facilities, when, with methods crude and lacking help, he worked as best he could. But to-day, especially for the surgeon, the obstetrician and the pædiatrician, the co-operation of a well-directed, well-equipped hospital has revolutionized medical practice, has permitted surgery absolutely impossible on the kitchen table, has removed the nightmare from the practice of obstetrics, has made possible the proper study of diabetic or nephritic patients, and has been instrumental in the saving of countless thousands of lives. It is quite true that the hospital could not carry on without the aid of the doctor, but it is almost equally correct to say that modern efficient medical practice would be impossible without the hospital.

One hears many criticisms of this profession of ours which we love and respect so highly, some unmerited and ridiculous, others warranted and salutary, but one which is frequently heard by those whose work brings them intimately into contact with hospital boards and directors is that all too frequently the interest of many medical men in their hospital does not extend beyond their own personal interests or those of their patients. With this statement is frequently coupled the comment that we, as medical men, are so keenly interested in the scientific side and, with that in mind, are so urgent in our request for the most modern and elaborate equipment that we lose sight of the need for economy, of the necessity to balance the hospital maintenance budget.

Undoubtedly we all, boards of trustees and medical staffs, could profit by a wider realization of the many varied problems of hospital work, and one of the occasions upon which this "get-together" is possible is the annual convention of the provincial hospital association. The hospitals in most of our provinces are banded together in very active associations and the programs at their annual conventions are most interesting and highly educational. It is a matter of regret that in many of the provinces the attendance of medical men, other than medical directors, is altogether too low. There are, of course, extenuating circumstances. One cannot go to all conventions; parts of the program may not be of vital concern to the doctors; one may not know many delegates before going, etc., but the fact remains that problems are discussed there which are of real concern to the doctor, which he only can answer, and in the discussion of which his opinion would be of inestimable benefit to the others present.

Many questions come up at hospital conventions concerning the rights and privileges of doctors, especially in the smaller hospitals, and all too often they are "settled" without a medical man *in active practice* being present to present or defend the medical viewpoint. Recently, from the records in the library of our Department of Hospital Service, a few questions were selected which have come up in the round-table discussions at some of our hospital conventions; these round-table conferences are now a leading feature of the programs at these meetings. A few of the questions recently raised are as follows:—Should the operating room supervisor act as first assistant to surgeons? Should the doctor be permitted to charge for services to private cases in public wards? What is to be done when staff members openly resent reorganization efforts of trustees? How can we remove undesirable doctors from the staff? Has the operating room supervisor the right to refuse permission for a clean non-urgent laparotomy immediately following a septic case? How extensive surgery should be permitted in small hospitals? Should nurses take verbal orders from doctors? What should be done when doctors do not come at the appointed hour for operations? Should pupil nurses select their own physician? To whom do X-Ray films belong? Has another doctor the right to see these films?

These are but a few of the many questions discused and answered at these conventions, and it is obvious that more medical men should be present to help mould hospital policy. The possibilities for service and the very reputations of both doctor and hospital depend upon the closest mutual co-operation. The sooner the physician or surgeon takes a little time off to study the general problems of his "workshop," the more efficient and co-ordinated will our health work become.

*Reprinted from the September, 1930, issue of the Journal of The Canadian Medical Association.

Strange, But True

The number of medical discoveries made by non-medical men is surprising.

Quinine was given to the world by a Jesuit priest who brought the knowledge to Spain from the aborigines of Peru in 1638.

Digitalis was the remedy used by an old Shropshire peasant woman to cure dropsy.

Colchicum came to the medical profession through a French soldier stationed in Algeria. From the natives he learned of its use in treating rheumatism.

Galileo perfected the first thermometer and another astronomer, Kepler, was the first to record the pulse.

Kingston General Hospital Completes Its Re-Construction Scheme

IN 1811, one hundred and twenty years ago, a few citizens of Kingston organized the Kingston Compassionate Association, for the purpose of providing shelter, medical service and nursing for the sick poor. From this benevolent action of long ago has grown the present great institution. The service problem may have changed, but the spirit which animated the founders is the same that impels our people to-day: the spirit of compassion for the poor and for all who are sick and suffering.

In 1833 it was found necessary to secure a proper building. A grant of £3,000 was made by the Legislature, and a Board of Commissioners was formed to erect a hospital. The front and central building of the present hospital group, now known as the Main Building, was the result. From 1837 to 1841 it was in partial use for the purpose intended, but has the historic distinction of being the first meeting place of the United Legislature of Canada for the period of 1841-1844. In 1844 the building was reopened as the Kingston Hospital, and from that date this work has been continuous. As hospital work has broadened, there has grown around the central and historic building an institution modern in every respect.

The Kingston General Hospital is controlled by a Board of Governors. This Board of Governors each year elects a Managing Committee, which committee, through the hospital superintendent, is held directly responsible for the administration details of the hospital. The hospital is fortunate in having its very close association with Queen's University. The heads of the different medical departments of the University carry on at the hospital as chiefs of their respective departments. The Pathological Division of Queen's University is connected directly with the hospital buildings and undertakes for the hospital all of its pathological, bacteriological, biochemistry and seriological work.

In 1916 the governors of the hospital decided to promote a complete re-construction of their institution. Their object was to make it modern in every respect, capable of serving the Eastern Ontario district, and to provide facilities whereby it would become a real teaching hospital associated with the Queen's Medical School.

Messrs. Stevens & Lee, Hospital Architects of Toronto and Boston, were commissioned to make a survey of the institution and to prepare drawings, together with a report and estimates for a modern hospital of about four hundred beds, and the Board of Governors undertook the task of promoting the necessary finances. The actual reconstruction was commenced in 1920 and the work completed to date is as follows:

Clinic Building	$430,500.00
Empire Wing	94,000.00
Laundry	36,000.00
Service Building	117,000.00
Nickle Building	135,000.00
Nurses' Home	195,000.00
Internes' Home	20,000.00
Children's Section	20,000,00

A panoramic view of the Kingston General Hospital group, including the recently completed Watkins Wing. From left to right the units are as follows:—Doran

Contagious Disease Hospital	175,000.00
Central Heating Plant	225,000.00
	$1,447,500.00

The buildings and facilities as referred to above have been completed and paid for.

To complete the building scheme there only remained at the beginning of 1930 the re-construction of what is known as the Main and Watkins Building. The estimated cost of this work was $350,000.00, and while no funds were on hand for this final phase of the reconstruction scheme, the Board felt that they must finish up this last link in their original expansion plan.

Temporary financing was arranged by a mortgage loan, and the contract for this section awarded to the Alexander Garvock Construction Company of Ottawa.

With the completion of the new work under contract, the Kingston General Hospital has a capacity of about four hundred beds. It is complete with all modern and adequate facilities for the following departments — Pathological, Biochemical, X-Ray, Physiotherapy, Hydrotherapy, Cardiography, Maternity, Basal Metabolism, Out-Patients, Contagious Disease, Pediatric and Orthopedic, Psychopathic, and all of the general services associated with general hospital work.

The buildings which have just been rebuilt contained originally three storeys and basement, the walls being constructed of Kingston limestone and the interior with ordinary wooden floors and partitions. The entire interior of both buildings was removed, so that nothing remained except the stone walls, and inside these has been erected a modern fireproof structure. The Main Building has had two storeys added to it and the Watkins Wing one additional storey, thus giving them six and five floors respectively. On the east end of the Watkins Wing and adjoining the Doran Building, has been erected a staircase with sun room on each floor.

While the two parts of the building under discussion in this article have always been referred to by their names, Main and Watkins Buildings, they are, for all practical purposes, one complete unit and will be treated as such in the description that follows.

The outstanding feature of the new construction, in addition to providing modern facilities, has been an effort to avoid noise of all sorts. The building is located far enough from the street so as to have no annoyance from that source, and all of the floor services, such as elevators, utility rooms, nurses' stations, serveries, etc., have been grouped in the centre and away from the immediate patient section. Another feature in the construction has been an effort to provide a graded service. On one floor as many small private rooms have been provided as could possibly be arranged. The idea being to have these rooms available at a low price. On the next floor rooms of an average size have been arranged, to have these available at a moderate price. On the top floor much larger rooms have been provided with a more expensive finish, which will be available to patients who are able to pay for same.

The basement, or ground floor as it should more rightly be called, is well out of grade on the north and completely so on the south, and is being used for storage rooms, work rooms and other special services.

The main entrance to the hospital is as before, into the original Main Building, the walls of which have stood for almost 100 years. Upon entering the building the visitor finds himself in a spacious and attractively designed entrance foyer off which are the various administrative offices, waiting and consultation rooms, etc., and from this foyer access is also gained through connecting corridors

Bldg., the new Watkins Wing which adjoins the balconied Main Bldg., the Nickle Bldg. (Maternity) and Richardson Laboratories. The Douglas Wing is at rear.

R. FRASER ARMSTRONG,
General Superintendent, Kingston General Hospital.

to the other buildings of the group. The second floor contains at the centre the various service units for the adjoining patients' rooms. This floor accommodates 13 private and 13 semi-private patients. At the east end of the floor there is a large sun room towards the south and four of the private rooms facing Queen's University campus have a common balcony adjoining them.

The third floor accommodates 13 private and 10 semi-private patients. The average size of the private rooms on this floor is somewhat larger than on the second, but other details are the same. The fourth floor has 7 private rooms of the smaller type, 7 large private rooms with private bath rooms, and 3 with private toilets. The rooms on this floor have a very fine view over the lake and surrounding country for those on the south side, while those on the north overlook Queen's University buildings and campus. The remaining parts of this floor are also the same as for the second floor.

The fifth floor is over the central part of the group or, in other words, covers the area of the original Main Building only. This floor contains two exceptionally large solaria facing towards the south and west and commanding an unsurpassed view of the surrounding country and Lake Ontario. Small service rooms have been provided on the floor to take care of the immediate needs of patients enjoying the sunlight and vistas to be obtained from these rooms.

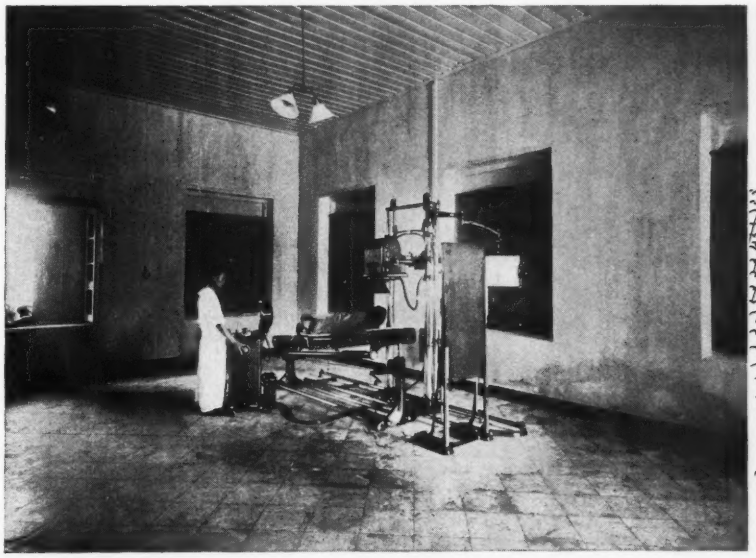
The general hospital detail used throughout the buildings is of the most modern type. All service rooms, such as Sink Rooms, Serveries, Toilets, etc., have exhaust ventilation with fans located above the main roof. The building is heated with forced hot water from the main power house, located at some distance from the hospital. Electric refrigeration is provided on each floor. Each patient's room contains a built-in wardrobe, nurses' signal, telephone and a radio outlet for ear phones which will be connected to a main receiving set when so decided by the Hospital Board, and all rooms not having their own private bathroom have a wash basin. Corridors, Sink Rooms, Serveries and other such service rooms in which there is a certain amount of noise made in the ordinary routine work are to have the ceilings finished with an acoustical material so as to deaden the sound reverberations as much as possible. The elevator is of the most modern automatic push button type, and there is also a dumb waiter for food service to the floor serveries.

A most complete and modern nurse call system is being installed. The call buttons are located near each patient's bed and each call is registered by a light over the door to the patient's room, in the general nurses' station, also in a subsidiary room for the use of special nurses. In addition there is also a soft sounding buzzer in serveries and utility rooms. In this way each call is registered in five different places on the floor, thus insuring as rapid attention of the nurse as possible.

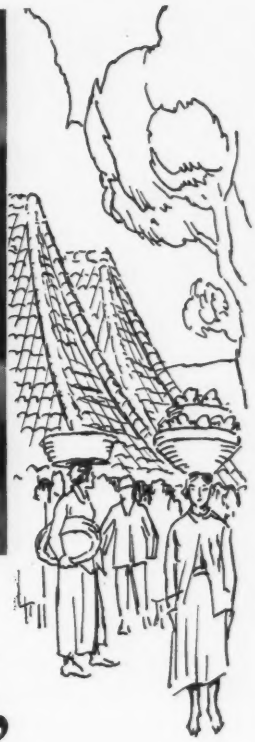
As we go to press with this issue of the Canadian Hospital word reaches us that the new wing of the Kingston General Hospital will be opened on Florence Nightingale or National Hospital Day, May 12th, by the Hon. John M. Robb, Minister of Health for Ontario. In addition to the opening of the new building, the Campbell Bequest Tablet was to be unveiled, probably by a relative of the donor.

The Campbell Bequest Tablet was given to the hospital by Charles Sandwith Campbell, K.C., in memory of his father, the Hon. Sir Alexander Campbell, K.C.M.G., Lieutenant-Governor of Ontario from 1887 to 1892. Following the opening of the new building and the unveiling of the tablet the newest addition to the hospital was to be thrown open to the public for inspection.

MISS ANNIE BAILEY, R.N.
Superintendent of Nurses, Kingston General Hospital.



Victor Model "A" Shock Proof X-Ray Unit in Pak Klong Lord Army Hospital, Bangkok, Siam



In Far-off Siam, too,

they know the advantages of Victor Shock-Proof X-Ray apparatus

PRACTICALLY every civilized country in the world is now using Victor Shock-Proof X-Ray Units.

The above photograph shows one of a number of outfits that have been installed in Siam. This one is operated in the Pak Klong Lord Army Hospital in Bangkok.

It is not only the feature of 100% electrical safety that leads to the selection of this Victor apparatus by institutions everywhere, but also its consistent operation regardless of atmospheric conditions. This is because the Coolidge tube is immersed in oil and sealed within the all-metal tank or tube head. Thus its operation cannot be affected even by Siam's extremes in climate, where temperatures range from 85° to 92° F., with relative humidity of 80 to 85, and sometimes 100.

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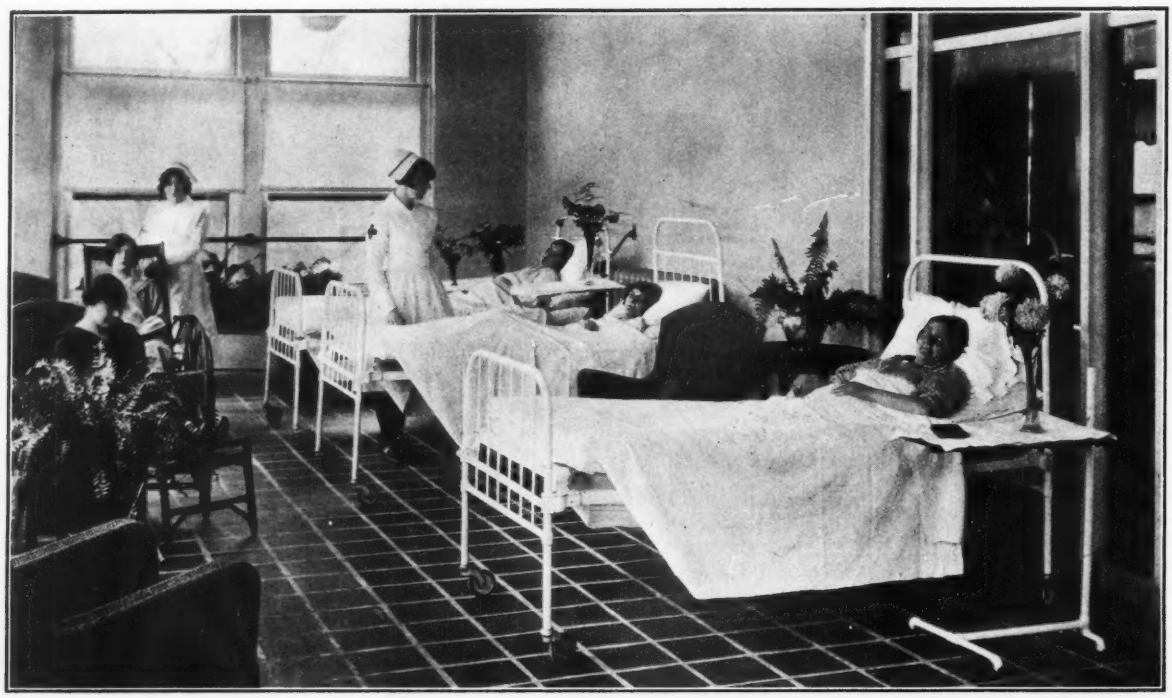

Kingston from the air. Showing the General Hospital group of buildings near the lake at right centre.

Above—one of the sun parlours, public patient section.

Rates and Index Numbers of Hospital Charges Throughout Canada

HOSPITAL administrators and others concerned with hospital charges and operating costs will be interested in the following report published by the authority of the Hon. H. H. Stevens, M.P., Minister of Trade and Commerce, and prepared by the Department of Trade and Commerce, Dominion Bureau of Statistics Division. Copies of this report are available, we are informed, on application to the Dominion Bureau of Statistics, Ottawa.

The summary, reprinted herewith, is accompanied by seven pages of charts showing average hospital charges for public ward and semi-private and private rooms; average operating room charges; average cost of maintenance per patient per day; index numbers of public ward, semi-private and private room charges (1913 and 1926); index numbers of operating room charges (1913 and 1926); index numbers of cost of maintenance per patient per day (1913 and 1926). All these figures are given by provinces. The report follows:

According to returns received by the Dominion Bureau of Statistics from 198 hospitals, rates charged in 1929 averaged 6.6 per cent higher than in 1926, and 1.8 per cent above those for 1928. Weighted index numbers of certain hospital charges and costs, using 1926 as well as 1913 data as the basis of comparison, are given on the following pages. Separate indexes have been constructed for rates of public wards, semi-private and private rooms, operating room charges, and the cost of maintenance per patient per day. It will be seen that all of these indexes show an almost unbroken advance from 1913 to 1929.

A general survey of the changes which occurred in 1929 indicates that the greatest increases in rates were for public wards. Semi-private room rates moved upward very slightly, while private room rates were shown as a little lower for the first time since 1913. Operating room charges remained almost stationary. The average cost of maintenance per patient per day advanced again, and was 110.4 per cent above the figure given for 1913. It is interesting to compare this advance with that registered by rates, which have apparently risen only by about 90 per cent according to the movement of a weighted average of the rate figures which follow.

An average of the public ward charges made in 1929 amounted to $2.03, as compared with $1.96 in 1928. This item was $1.83 in 1926 and $1.02 in 1913, an almost uninterrupted increase having occurred since that time. Provincial average rates in 1929 ranged between $1.50 for Prince Edward Island and $2.52 for British Columbia. The Dominion index number of public ward charges rose from 107.5 in 1928 to 111.3 in 1929, having been 55.8 in 1913.

Semi-private room charges moved but slightly from an average of $2.85 in 1928 to $2.87 in 1929. The range of provincial rates in 1929 was marked by the figure for Ontario, calculated as $2.20, and that for Alberta, given as $3.52. The Dominion index number for semi-private room charges has advanced steadily from 54.0 in 1913 to 102.1 in 1929.

Private room charges averaged $5.23 for the Dominion in 1929, as against $5.25 in 1928. Moderate reductions for Quebec, Ontario and British Columbia, more than counterbalanced increases for Nova Scotia, Manitoba and Alberta, causing the first decline in this average since 1913, as noted above.

Operating room charges, obtained by averaging rates given for major and minor operations, were $8.37 in 1929 as against $8.36 in 1928. Averages advanced slightly for Nova Scotia, New Brunswick, and Saskatchewan, but otherwise were unchanged. The Dominion index number for operating room charges was 102.3 in 1929, as compared with 102.2 in 1928, and 63.8 in 1913.

The average cost of maintenance per patient per day as indicated by the returns received mounted from $3.40 in 1928 to $3.62 in 1929. These figures represent a complete cost estimate, including such items as taxes, depreciation, insurance, interest, etc., in addition to the more or less standard items of food, wages, medical and institutional supplies, heat, light, power, and water. It is worthy of note that separate calculations, including only the latter set of items, remained on the average practically stationary in 1929, while an advance of 4.0 per cent occurred for complete costs. The cost of maintenance per patient per day has risen almost without interruption since 1913, when the Dominion average was $1.68. The Dominion index during the interval from 1913 to 1929 has mounted from 49.5 to 104.2.

An interesting commentary on increased cost of maintenance figures is furnished by reports regarding indigent patients treated by hospitals. Such patients of course pay only fractional amounts of the actual cost of their treatments, or else are treated free. The number of indigents reported in 1929 for 198 institutions was 340,593, which indicated an increase of roughly 10 per cent over figures given for 1928.

Editor's Note:—Questionnaires calling for details of 1930 hospital charges and operating costs similar to those upon which the foregoing summary is based, will soon be mailed to hospitals. We again emphasize the necessity for complete replies in order that the statistical hospital survey referred to in the April number of the Canadian Hospital may be comprehensive and up-to-date.

VANCOUVER, B.C.—Twenty beds in the Vancouver General Hospital, formerly occupied by indigent patients, either bedridden or convalescent, have been released for general use by action of the Board of Directors. An arrangement for the care of these patients with the Royal Derby Hospital, 1066 West 13th Street, has been approved. The latter institution takes over these patients at $40 per month per patient. The agreement provides that care will be up to the standard of the Vancouver General Hospital and under the supervision of a house surgeon from that institution. It will be operated in the nature of an annex. Beds and other equipment will be loaned by the hospital for the use of these patients.

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TRAMPLING ON THE RULES

PART I

By S. S. GOLDWATER, M.D.
Hospital Consultant, New York City

THE number of laws that were written on the tablets at Sinai is well known. Nobody will ever know the number of laws of lowlier origin that have been formulated for the government of hospitals, and perhaps there would be fewer such laws if the ten commandments were more generally observed. Every hospital, or nearly every hospital, has a multitude of written rules, while in mature hospitals of quality there exist besides many unrecorded traditions upon the willing observance of which the reputation of the hospital chiefly depends.

Successful Hospital administration probably depends less upon the structure of rules than upon the manner of their interpretation.

Hospital standardization so-called is really an attempt to lay down basic rules for the guidance of all hospitals. For purposes of diagnosis or classification definitions or standards are excellent; for effective administration a vigorous, well-informed, and sagacious governing body, aided by a capable executive officer, are indispensable. Successful hospital administration probably depends less upon the structure of rules than upon the manner of their interpretation. The role of the hospital superintendent in the interpretation of hospital rules bears a certain resemblance to that of the Supreme Court of the United States when it undertakes to interpret the Constitution in the light of the intentions of the framers; current thought concerning public needs and social policy are important factors in determining the result in both cases.

I shall begin the discussion of hospital rules and their enforcement or non-enforcement with the statement of a concrete problem. A hospital superintendent recently inquired whether she would be justified in requesting her trustees to expel a surgeon of junior rank who in the face of repeated reminders persists in his failure to record the details of his operations and after-care of private patients as required by the rules of the hospital. My first impulse was to declare that such a man was unworthy of his opportunities and should be dealt with severely; but it occurred to me afterward that it would be unfair to enter judgment without a more intimate knowledge of both the man and the hospital; rebellion does not always spring from unworthy motives, and its effects are not necessarily destructive.

Where can one find a hospital whose every rule is observed to the letter? To the perplexed and harassed hospital superintendent trampling on hospital rules must often seem to be one of the favourite pastimes of the medical profession, but this is an unjustifiably pessimistic view. Thoughtful and aggressive action on the part of great national bodies of physicians and surgeons has contributed much to the good order and efficiency of hospitals, and the non-co-operating staff member in any hospital is conspicuous precisely because his attitude of indifference or hostility is the exception and not the rule. A hospital superintendent needs to be patient; if he means to be fair, he will be ready to concede that the failure of a member of the staff to observe a particular hospital rule, however damaging to the dignity of the hospital, is only one phase of the offender's institutional conduct, and that while any such failure must be placed on the debit side of the account there are many cases in which the credits are so numerous that the hospital may well hesitate to resort to harsh measures. The superintendent who is more interested in the defense of official dignity than in the essential needs of his patients will soon put himself and his hospital in the wrong.

The offender cited above is described as a junior member of the staff; I wonder whether his junior rank was intentionally stressed, for the age and rank of one who breaks rules are not unimportant. A young man who is aggressively and obstinately rebellious does not merit the consideration which is due one who over a long period has demonstrated his usefulness to the hospital, the public, and the profession. On the other hand, the influence which older members of the staff exert upon their juniors must not be forgotten. The individual whose conduct is here in question is described as one who received his surgical training in the hospital whose good order he is now upsetting; presumably in the course of that training he was influenced by the attitude of his seniors, and it would be interesting to know whether he is attempting to pattern his conduct upon that of some older man whose fault the hospital was willing to condone in its appreciation of a lifetime of praiseworthy service. Certainly no mistake will be made if the superintendent and her board appeal to this junior staff member with all the eloquence and force at their command to conform to a rule which is not merely the arbitrary edict of a governing board but which derives its sanction from the nature and needs of scientific medical practice.

Nowadays the rule that prescribes adequate clinical records should be one of the least troublesome of all the rules and regulations that hospitals try to enforce. The significance of the rule has been widely advertised; it has powerful professional support, and its reasonableness is not questioned; yet even this rule, as the reported case shows, may now and then be contested or ignored. In the instance referred to the offender will probably be brought into line by the application of suitable pressure. Sometimes cases of this kind are far more difficult to handle. Imagine the dilemma of a hospital whose non-conformist

(Continued on page 20)

Note.—Reprinted by courtesy of Modern Hospital.

Trampling on the Rules

(Continued from page 18)

happens to be a skilful surgeon of mature years, one whose reputation as a safe and brilliant operator and whose command of a large private practice combine to make the hospital look upon him as an important asset. Would the hospital be justified in dismissing such a man from its staff because of his failure to keep his histories up to date?

When the hospital's star performer is involved the enforcement of an inconvenient hospital rule always becomes difficult. Not long ago, a hospital superintendent who takes pride in the perfection of his private-room food service invited me to see his central-tray system in operation. In this hospital the visiting staff are forbidden by rule to examine or treat patients during the meal hour. Inspection of the meal system began in the kitchen, where every detail of food preparation and tray loading was carried out with precision. From the kitchen we proceeded to the patients' floors, and on one floor we noticed that the distribution of eight of the twenty-odd trays that were destined for this floor was indefinitely halted. Why? The hospital's busiest surgeon (a member of the courtesy staff, in this instance, commanding an enormous private practice) had been compelled by circumstances to shift his visiting hour and had arrived at the very moment when the trays appeared. Declaring his inability to return later, he proceeded to make rounds. The head nurse, sensing the unwillingness of the hospital to offend its principal private-room feeder, assented. The superintendent confessed that this surgeon was a thorn in his side, from whom he could get relief only by depriving the offender of his hospital privileges; but timorous about the loss of private-room income, he hesitated to take a decisive stand. How many hospital superintendents, I wonder, find themselves in a similar situation?

All hospital rules are not made by laymen for the purpose of regulating the conduct of medical men; a considerable part of the prescribed routine in American hospitals is related to clinical practice, and in this field controlling measures are usually prescribed by the medical staff itself or by medical executive officers. But the professional origin or sponsonship of a hospital rule does not always save it from the disintegrating influence of forgetfulness or of unwarranted self-assertion.

Who is it that frets and fumes when a clinical record cannot be found? The very clinician probably who, if he happens to be preparing an article for publication, surreptitiously removes a dozen clinical histories from the record room in defiance of all law and order, for the purpose of examining them at leisure in the privacy of his study. Surgeons unanimously declare that operating room visitors should be kept at a distance from clean abdominal wounds; it is the decree of the surgeons themselves that in many hospitals bans visitors from the floor of the operating room and relegates them to the spectators' gallery; but let a surgeon espy an influential visitor in the gallery, and the distinguished guest is at once offered the privilege of the operating room floor!

The inconsistency of medical men in their hospital conduct is at times inexplicable. Many years ago, on a tour

(Continued on page 25)

SUTURES IN ANCIENT SURGERY

LANFRANCHI OF MILAN, driven from his native city for political reasons, became associated in 1295 with the College de St. Côme in Paris. Here his straightforward style of lecturing and his innovation of bedside instruction soon attracted hundreds of students. Lanfranchi was the first to describe concussion of the brain, and he differentiated between carcinoma and hypertrophy of the female breast. In treating injured nerves he distinguished between longitudinal wounds and complete transverse separation; in the former advising suture of the skin wound only, and in the latter union of the divided nerve with fine sutures.

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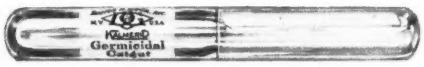

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GERMICIDAL, being impregnated with potassium-mercuric-iodide.† Chromicized to resist absorption in fascia or in tendon for approximately thirty days. The non-boilable grade is extremely flexible.

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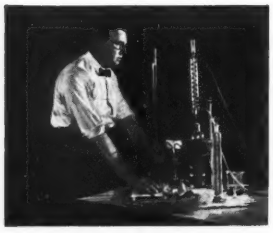

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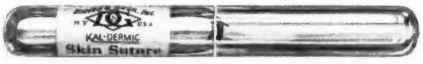
"IDEAL FOR DERMA-CLOSURE"

A NON-CAPILLARY, heat sterilized suture of unusual flexibility and strength. It is uniform in size, non-irritating, and of distinctive blue color. Boilable.*



NO.		INCHES IN TUBE	DOZEN
550	WITHOUT NEEDLE	60	$3.60
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Sizes: 000 (FINE) 00 (MEDIUM) 0 (COARSE)

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IDENTICAL in all respects to Kal-dermic skin sutures but larger in size.

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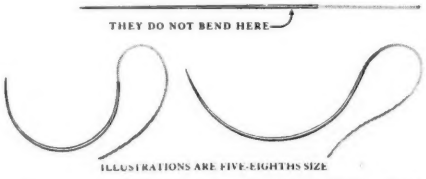

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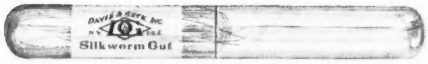

NO.		INCHES IN TUBE	SIZES
350	CELLULOID-LINEN	60	000, 00, 0
360	HORSEHAIR	168	00
390	WHITE SILKWORM GUT	84	00, 0, 1
400	BLACK SILKWORM GUT	84	00, 0, 1
450	WHITE TWISTED SILK	60	000 TO 3
460	BLACK TWISTED SILK	60	000, 0, 2
480	WHITE BRAIDED SILK	60	00, 0, 2, 4
490	BLACK BRAIDED SILK	60	00, 1, 4

BOILABLE

Package of 12 tubes of a size.....$3.60
Less 20% on gross or more or $34.56, net, a gross

Short Sutures for Minor Surgery

NO.		INCHES IN TUBE	SIZES
802	PLAIN KALMERID CATGUT	20	00, 0, 1, 2, 3
812	10-DAY KALMERID "	20	00, 0, 1, 2, 3
822	20-DAY KALMERID "	20	00, 0, 1, 2, 3
862	HORSEHAIR	56	00
872	WHITE SILKWORM GUT	28	0
882	WHITE TWISTED SILK	20	000, 0, 2
892	UMBILICAL TAPE	24	1/8-IN. WIDE

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914	10-DAY KALMERID "	20	00, 0, 1, 2, 3
924	20-DAY KALMERID "	20	00, 0, 1, 2, 3
964	HORSEHAIR	56	00
974	WHITE SILKWORM GUT	28	0
984	WHITE TWISTED SILK	20	000, 0, 2

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Package of 12 tubes of a size.....$3.00
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The ash of D&G Sutures is assayed to make sure that no traces remain of uncombined chromium nor of other residues of the chromicizing process.

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FOR immediate repair of perineal lacerations. A 28-inch suture of 40-day Kalmerid germicidal catgut, size 3, threaded on a large full-curved needle. Boilable.*

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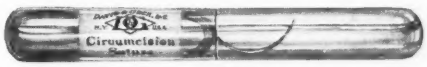
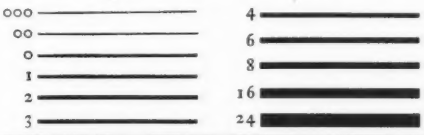
A 28-INCH suture of Kalmerid germicidal catgut, plain, size 00, threaded on a small full-curved needle. Boilable.*



No. 600. Package of 12 tubes.....$3.60
Less 20% on gross or more or $34.56, net, a gross

Universal Suture Sizes

All sutures are gauged by the standard catgut sizes as here shown



*These tubes not only may be boiled but even may be autoclaved up to 30 pounds pressure, any number of times, without impairment of the sutures.

†Potassium-mercuric-iodide is the ideal bactericide for the preparation of germicidal sutures. It has a phenol coefficient of at least 1100; it is not precipitated by serum or other proteins; it is chemically stable—unlike iodine it does not break down under light and heat; it interferes in no way with the absorption of the sutures, and in the proportions used is free from irritating action on tissues.

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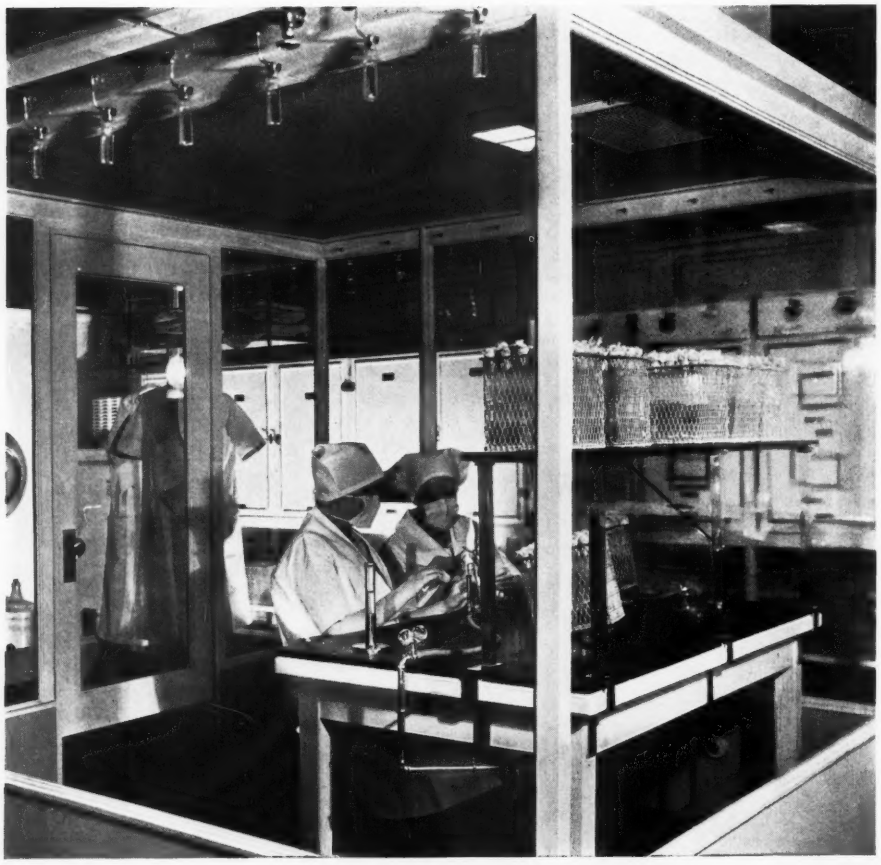

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Trampling on the Rules

(Continued from page 20)

of the medical capitals of Europe, I was invited by a famous professor of children's diseases to accompany him on his contagious war rounds. These wards, four in number, were arranged in the form of a Greek cross; the buildings did not meet at the centre of the cross. but were separated by an open air space which was introduced, presumably, as a precaution against air-borne infections. The professor explained that three of the pavilions were assigned to measles, scarlet fever, and diphtheria, respectively, and that the fourth was used for mixed infections. The party of inspection, which included the professor and a number of students, first entered the diphtheria pavilion, where each visitor was provided with a long-sleeved gown, overshoes, a face mask, and rubber gloves; thus muffled and protected, we progressed from bed to bed. The professor handled his patients freely, examined their throats with the aid of a tongue depressor, and kept up a running fire of comment as he went along. Before leaving a ward, every member of the party, *except the professor,* removed all of his protective coverings, and upon entering the next ward, each student and visitor was provided with an entirely new outfit; but the professor entered ward after ward without bothering to change mask, gown, or gloves; indeed, he took no precaution to prevent the spread of infection except to dip his gloves in an antiseptic solution, and this he did whenever the notion entered his head, and not systematically between each two examinations. A ward for mixed infections, indeed!

Ignorance is Bliss

Efforts to control the spread of communicable diseases in hospitals are sometimes innocently circumvented by playful children who know nothing about hospital rules. A municipal hospital in an Eastern city, which takes great pride in the scientific character of its prophylactic arrangements, provides separate pavilions for scarlet fever, diphtheria, and measles. Convalescent scarlet fever patients who are up and about are permitted to leave their wards in pleasant weather and to enjoy the air on open balconies. It was somewhat disconcerting to the resident physician who showed me about the hospital to come suddenly upon a lively game of hand ball that was being played by the children on two adjacent balconies, who passed the ball back and forth from the scarlet fever to the diphtheria pavilion in great glee. The dangers of this form of communication between the two groups of children are apparent, and I imagine that the resident physician did not lose much time after seeing these children at play in demanding the screening of the porches.

In general as well as contagious-disease hospitals, pediatricians nowadays stress the desirability of separating children by means of cubicle partitions. As a part of the prophylactic system, children occupying single cubicles are provided with play toys for individual use. The function of the cubicle partition is not always fully appreciated, however, and it is a common thing to see partitions which are not carried to the floor, an arrangement which permits imaginative youngsters to take advantage of the open space beneath the partitions for the exchange of toys, pencils, and other objects which children delight to barter.

Hospital Aids News

Mrs. O. W. Rhynas, President of the Ontario United Hospital Aids' Association, has published a brief and intimate sketch of the life of Florence Nightingale in commemoration of that great nurse, which is especially interesting in view of the celebrating of National Hospital Day, the birth date of Florence Nightingale, on May 12th. This sketch could not have been distributed at a more auspicious time. Further proof of Mrs. Rhynas' activity and untiring energy on behalf of Hospital Aids are two other booklets published by her in the last few months. One was an inspiring "New Year's Message," sent out to the affiliated Aids; the other a history of the National Hospital Day Movement and an exhortation to the various Aids to plan some schedule for the celebration of this increasingly important event in hospital circles.

* * *

A theatre night which netted the fine sum of $101.53 was held at the Capital Theatre, Goderich, under the auspices of the Women's Hospital Auxiliary. Nurses from the local hospital acted as ushers. Gratitude is expressed to the proprietor of the theatre for his kindness and co-operative spirit.

* * *

A very appropriate tribute was paid to a faithful hospital worker at the Public General Hospital, Chatham, Ontario, when Mrs. Manson Campbell was called upon to sever the purple and gold streamers which held the gates of the new elevator which was installed recently. Only those who live in and about Chatham know the wonderful service which the Ladies' Assisting Society accords the local hospital. It is largely through their unceasing efforts that the hospital occupies the place it does in the Canadian hospital field. Mrs. Campbell is one of the little band who pioneered for the institution, and it seems indeed fitting that she should have been called upon to officiate at this ceremony.

J. & J. Cash, Inc., Offer New Dual Marking System

Hospital executives will be interested in a new system of marking which J. & J. Cash, Inc., Belleville, Ontario, have recently announced. In order to meet the situation where a laundry desires to ink-mark a garment or have some individual mark of its own on the goods, the company now provides a dual marking system which has the customer's full name together with any individual laundry mark specified, all woven on one tape.

This increased service is offered at no additional cost and acts as double proof of ownership at all times. These laundry marks are so woven that they may be cut off, making two marks, if required.

Full particulars regarding the new system may be procured by writing J. & J. Cash, Inc., Belleville, Ont.

New Literature on Beilin Enema Outfit

Of interest to our readers is a new booklet published by the General Electric X-Ray Corporation on the subject of Beilin Enema Outfits used for barium enemas, rectal feedings, colon lavage, colostomy irrigation and general floor duty. Copies of this booklet are now ready for distribution.

Is Your Hospital Interested in Physiotherapy?

By ENID G. GRAHAM (Mrs. Duncan Graham), Toronto,
Member of the Board of Directors, Canadian Association of Massage and Remedial Gymnastics

Read this practical article indicating the feasability of instituting a Physiotherapy Department. Various opinions are expressed on the minimum cost of installing a Department and on the type of worker who should be engaged.

IN the March issue of The Canadian Hospital Journal, an article by Dr. G. Harvey Agnew on Occupational Therapy was reprinted from the Canadian Medical Association Journal. By physiotherapy is here meant that branch of medical practice which deals with the employment of various physical energies in the treatment of disease, i.e., massage, muscle re-education, corrective work for children, electrotherapy, heat and light therapy, and hydrotherapy.

Considerable interest has been evinced in some hospitals which would like further information on the subject, especially with regard to the financial side of the Department, and to the necessary equipment and its cost.

We are permitted to quote the following information received from Dr. F. W. Harvey, Director of the Physiotherapy Department of the Montreal General Hospital, and Director of the McGill School of Physical Education.

"Physiotherapy has now become such a big thing that we find very few medical men with a knowledge of all its branches. The result is that in most hospitals, physiotherapists confine their work to electro-therapy and very little attention is given to massage and re-education work. I feel that in our Hospital the work is well-balanced and that the essential thing in running a physiotherapy department is to have good technicians.

"I certainly think such a department, properly conducted, should pay its way. Of course, much depends upon the number of private patients receiving treatment. Our Department at the General nearly pays its way, in spite of the fact that most of our treatments are for public cases, for whom no charge is made. Our revenue, however, has increased recently on account of a large number of compensation cases. . . . At the Western Division, which is also under my charge, the Department has been run at a profit, as a larger number of private patients is treated there."

This statement is interesting, as it has been felt in some hospitals that the establishment of such a service for the benefit of patients, and to round out other forms of treatment, could be financially successful only where a majority of the patients pay for treatment.

Dr. George G. Greaves, Director of the Physiotherapy Department, Vancouver General Hospital, allows us to quote the following from an address he gave recently before the British Columbia Hospitals Association:—

"If such a department is established, it will be found to be of assistance to all the other services and its usefulness will be in direct proportion to the completeness of the department, and the competence of the staff. Services such as orthopedic, ear, eye, nose, throat, surgical, general medicine, maternity, neurological, skin, tuberculosis, genitourinary, all make use of the department and to an ever increasing extent.

"Physiotherapy is of value also because it can be shown that where it is properly used on appropriate cases, their stay in the hospital in many instances is shortened and in others, though their stay may not be reduced, their condition on discharge is better than it would otherwise be.

"Not only is the department profitable from the standpoint of discharges and results, but also from a financial standpoint. A department, after it has enough equipment and staff, should pay its way, and even yield a profit. Ours has done so. Our Department has not cost the hospital a cent; in fact the treasury has been enriched by several thousand dollars from having had the department. The amount of profit, of course, will depend mostly on the class of patients treated—that is, whether they are pay or non-pay patients. Hospitals restricting their patients to pay cases as some do, will have no difficulty in making a large cash profit. In other cases, the profits will vary, depending on the proportion of non-pay cases. Our treatment charges are not high, our collection averages about one-third of the booked amount, due to the fact that we book all work done whether pay or non-pay, and a large percentage of our work is non-pay."

One factor, not mentioned here, in establishing a physiotherapy department must be taken into consideration. The patronage of the hospital physiotherapy department is dependent to a certain extent upon the competition which might be given it by doctors who use privately owned physiotherapy equipment in their offices.

Dr. Greaves says further: "It is only when there is perfect co-ordination between the various services and the physiotherapy department that it can perform to the best advantage."

Dr. Greaves feels that in a large hospital there should be a Medical Director "who should have had several years' experience in the field of general work as well as being trained in physiotherapeutics. He will then be better able to utilize the facilities at his command and be a better consultant than he otherwise would be in the great variety of cases that he will be called upon to treat. He should be able to compare the results of regular medical and surgical methods of treatment, of any condition which is presented to him, with those to be obtained by physical means, to know when physiotherapy will aid other treatment or be superior to it. . . . The wider his previous experience, the more confidence the other members of the staff will have in his judgment."

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Is Your Hospital Interested in Physiotherapy?

(Continued from page 28)

In smaller hospitals, Dr. Greaves suggests that a medical man should give part-time to supervision of the department.

It would seem to us that this idea of a part-time appointment for a medical man might be quite feasible for the trained technician, in the smaller hospitals. Recently St. Catharines General Hospital and the Niagara Peninsula Sanatarium have decided to employ an occupational therapist, who will divide her services between the two institutions. Why should this idea not be utilized in the employment of a physiotherapist, or of one worker who has specialized in both physiotherapy and occupational therapy, as has been done recently in one or two cases?

With regard to the necessary accommodation for a department in the hospital, it is agreed by those engaged in this work that where proper accommodation is provided, higher fees for treatment can be charged. The ideal location for a department is on the ground floor, convenient to both out-door and ward patients, but at all events, it should be airy, even if not large. (Roughly speaking, 15 x 20 ft. is quoted as being enough space for one worker). There should be, if possible, a place where patients having general treatment can rest for a short time afterwards without being forced to leave the department at once to make way for other patients.

To quote Dr. Harvey again on the subject of equipment: "One can do with very little in the way of apparatus in a small hospital. Our equipment at the General Hospital some years ago consisted of a thermolite, Bristow coil, and a few bakers. Now we have most of the machines recommended for a properly equipped department.

"I think one can do very well with a diathermy machine, also one for giving faradism and sinusoidal current; a good sized baker and thermolite; quartz lamp, air and water-cooled, with the usual massage table, wall ladder and a few simple bits of apparatus for remedial exercises. . . . Without hydrotherapy equipment, I should say the preliminary cost should be somewhat between $2,000.00 and $3,000.00."

In many of the smaller hospitals, two or three massage tables (sometimes two or three cases can be supervised by one worker), a few carpenter-made pieces of apparatus for muscle re-education, and some form of deep heat treatment would seem the first essentials of equipment, and these cost very little. Surgeons are very keen about diathermy, and use it extensively in such conditions as stiffness of joints following injuries, gyneacological conditions, etc.

In consulting directors of various hospital departments, opinions vary as to which machines are used most extensively, but it would appear that the machines in most general use are the diathermy machines (portable), mercury quartz air-cooled machine, Bristow coil or other machine for muscle and nerve-testing, and frequently infra red, and baking equipment. In some departments, the carbon arc lamp is used, and where the installation is justified by patronage, the water-cooled ultra violet lamp is useful.

Some of the best firms dealing in X-Ray apparatus state that they have in stock re-conditioned diathermy

machines, etc., which can be bought at a great saving, and which go out with a new guarantee.

Authorities in this work estimate that the cost of more elaborate departments total roughly $3,000.000 to $5,000.00, this latter figure, however, including linen, and considerable furnishings. It would seem advisable that a general hospital should be equipped with something appropriate to every need, while other more specialized hospitals may confine their installation to one or two branches only of physiotherapy.

All authorities consulted agree that a properly trained technician is the first essential in providing for a good department, while Dr. Greaves adds: "I do not think it is fair to permit partially trained persons to 'cut in' on the work of persons who have gone to the trouble of taking a complete course. . . . The most important part of the equipment of any department is its personnel."

In this connection, the Physiotherapy Departments in the hospitals of which we have information—the Montreal General; the Royal Victoria, Montreal, the Children's Memorial Hospital, Montreal; the Toronto General Hospital, the Sick Children's Hospital, the Western, St. Michael's and St. John's (all in Toronto); Victoria Hospital, London; the Vancouver General, St. Paul's, Vancouver, and others, besides a number of Clinics, including Red Cross Clinics, throughout Canada employ members of the Canadian Association of Massage and Remedial Gymnastics, a chartered society founded on the lines of the Chartered Society of Massage and Medical Gymnastics, England. This Canadian Association is now recognized by medical men as the standard of training, skill and ethical code for this work in Canada.

The by-laws of this Association insist that their members (1) work only under medical direction, and (2) indulge in no form of advertising, except in recognized medical journals.

The most recent additions to this Association are the first graduates of a 2-year course in Physiotherapy at the University of Toronto (Department of University Extension). Some of these young women will probably go directly to hospital upon graduation in May, but others hope to intern for the summer months in hospitals where there is already an established department. These latter workers therefore should prove of value to hospitals which contemplate the opening of a department, for in such instances, experience in running a department is essential. Those interested in receiving further information on this subject could communicate with Mr. W. J. Dunlop, Dept. of University Extension, University of Toronto, or with Mrs. W. H. Woodcock, Educational Secretary, Canadian Association of Massage and Remedial Gymnastics, 17 Unsworth Ave., Toronto 12.

TRANQUILLE, B.C.—A modern ambulance has recently been acquired by the sanatorium. Stretcher cases arriving at Tranquille have, until now, been met at the train by a truck and patients to the Royal Inland Hospital have had to be conveyed over 11 miles of road in a similar vehicle. The new ambulance is equipped with two full length stretcher carriages and is so balanced that patients may ride with the least possible jar or discomfort. It carries first aid equipment and has accommodation for two attendants.

Well-Being of Both Patients and Staff Considered at Wolfville Institution

WHILE we believe that the well-being of hospital staffs is considered in so far as possible in most of our Canadian hospitals, nevertheless it was interesting to meet a hospital superintendent who seems to have planned a hospital with staff-comfort consulted equally with patient-comfort. The superintendent referred to is Miss Viva Bengtson of the recently completed Eastern Kings Memorial Hospital, Wolfville, Nova Scotia, whose acquaintance we made a few months ago when she passed through Toronto en route to the Pacific Coast for a well earned rest, after giving her attention to the hundred and one details which the equipping of a new hospital entails.

The Eastern Kings Memorial Hospital was formerly known as the Westwood Hospital, under which name it was operated for a period of 13 months, the name being changed upon moving into the new hospital premises. The hospital is faced with red brick and reinforced with interlocking tile. The floors are of cement with cove corners and are covered with green battleship linoleum. The entire building is as fireproof in construction as possible. Slanting window sills upon which there will be no temptation to place things are a very wise departure in construction.

The hospital boasts a very fine entrance hall, on the right of which there is a waiting room. The west wing is given over to the nurses' quarters, the superintendent's suite and a sun porch, which is also used as a workroom for the nurses. The east wing houses the doctors' room, office, operating and obstetrical suites, sterilizing room and laboratory, kitchen and dining room for nurses.

The operating room is tiled in blue and white and has Monel Metal furnishings throughout. The operating table is of the Universal type and the operating room lights are by Holophane. They are of the type peculiarly adapted to the use and pocketbooks of small hospitals. Miss Bengtson finds these lights absolutely without glare and in addition to the operating room she specified them for the delivery, anaesthetic and private rooms. In private rooms there are both centre lights and gooseneck bed lamps, the lights matching the furniture. All blankets, sheets and towels were supplied by the Textile Products Company, Toronto.

An Ideal food conveyor is a feature in the Eastern Kings Memorial Hospital. All food is cooked in the main kitchen and conveyed to the diet kitchen by elevator, where the trays are set and from which the food is dispatched to the patients' rooms and wards. Nothing but the best aluminum trays, silver, linen and china are used for both patients and staff. In the Diet Kitchen there is an electric stove, a Kelvinator refrigerator and an electric dishwasher. The maids' meals are served in an attractive breakfast nook adjacent to the main kitchen.

Sunny yellow is the predominating colour note in the

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Eastern Kings Memorial Hospital, Wolfville, N.S.

Important Advances Have Been Made in Hospital Lighting

By E. E. ACKLAND
Illuminating Engineer, Lighting Service Department,
Canadian General Electric Co., Limited

ANYTHING that is conducive to the physical well-being and mental serenity of the patient in a hospital should be considered as a logical part of the equipment of the institution. Sanitation is of the most vital importance. Ventilation is also necessary, as it is conducive to good health. But adequate, non-irritating illumination, properly controlled, is equal in importance to proper diet and efficient medical attention. The lighting should be of a character that does not tend to cause discomfort or to fatigue the eyes of the patient. Eyestrain and restlessness, as the results of poor lighting, have a very direct reaction on the nervous system, and may be a contributing cause of delay in the rate of convalescence.

Eyestrain and restlessness, as result of poor lighting, have a direct action on the nervous system.

Persons in every walk of life realize what advances in lighting have been made, as they are being confronted constantly by them, on the street, in the stores and public buildings. The improvements of recent years have made indirect lighting with its soft and harmonious effects, practical and economical. As these methods of better lighting have become more widespread, they have been adapted to almost every field of human activity. It is singular to note, however, that scientific branches of work have been the slowest to take advantage of the new era in lighting. The medical profession, although it has profited somewhat by modern lighting conditions, has still greater opportunities if it avails itself of the latest developments.

This condition applies particularly to hospitals, which as a class are far behind other types of buildings as to adequate lighting.

While most hospitals nowadays are equipped with the best instruments, sterilizing apparatus, operating and antiseptic devices known to science, it is indeed strange how little attention has been paid to artificial illumination. In many hospitals, the same fixtures and methods of illumination still prevail as when incandescent lighting was in its infancy.

Lobby and Reception Rooms

The main entrance of a hospital, a lobby or reception room, gives the patient and visitors their first impressions of the institution. These are always important. If the lighting is soft and pleasing, those entering will be made to feel restful and at ease.

The lobby of the more pretentious building usually receives special decorative treatment at the hand of the architect, being finished in artistic harmony with stairways and elevator entrances. An ornamental type of lighting fixture, in keeping with the decorative scheme is, therefore, essential to this part of the building. Here, if anywhere, money can be expended on massive fixtures to carry out the picture. At the same time, special precautions must be taken that the light sources are not glaring, as this would preclude the restful atmosphere desired.

For the smaller hospital, a simple indirect unit, shown in Fig. 1, will be found very suitable. A combination of one or more of these pendant ceiling fixtures with harmonious, well shaded wall brackets, will provide as even a distribution of illumination as is desirable.

Corridors

The hospital corridors or passageways are usually provided with hard surfaced walls, ceilings of light colour, and white tiled floors which can be readily cleaned, and to be in keeping with the modern sanitary conditions, the lighting fixtures should be of simple construction, easily cleaned, and non-dust-collecting. They should be so arranged that direct rays will not strike the eyes of the patients and cause annoyance.

For the lighting of corridors, the direct or semi-indirect enclosing globe, or the totally indirect bowl, is quite suitable, so long as the light source is well shielded.

Wards

The ward is essentially a sick room for accommodating a number of patients at the same time. The size is determined largely by the purpose for which the hospital is used. In private hospitals, most of the patients occupy private or semi-private rooms, and the wards are designed to accommodate only a few patients. Public institutions, however, as a rule, are composed entirely of large wards accommodating upward of forty patients.

Owing to the fact that patients' eyes are directed toward the ceiling for hours at a time, the lighting must be of a nature that will not strain or tire the eyes. The luminaire must be of low brilliancy, for a bright light source in the patient's field of vision is distressing and has an unfavourable reaction on his condition.

In the ward, there are four distinct requirements for lighting, as outlined below:

(a) In the evening hours visitors are received who desire to move about or sit and talk with the patients. At this time also, nurses and doctors perform their routine duties in preparation for the night.

A well diffused system of general illumination such as that provided by totally indirect and semi-indirect lighting has been used with satisfaction for providing general illumination in the ward. The luminaire should be of plain, simple, strong construction, and of low brightness

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Maintenance of Lighting Equipment

All lighting equipment, even in comparatively clean locations, will collect sufficient dust and dirt in the course of time to materially reduce the output of light. From the sanitary side of the matter also, it is important that there be no danger of dirt accumulating and falling into an open wound.

It is therefore strongly recommended that a systematic schedule of cleaning be adopted and strictly adhered to. Some one person should be made responsible for the carrying out of this schedule. Indirect fixtures should be wiped clean at least once every two weeks and thoroughly washed every two months.

Factories, stores, offices and theatres are all realizing the need for good illumination, and our hospitals, where good and sufficient illumination is an absolute necessity, should be examples of good lighting to which we could point with pride. The majority of them are not.

WINDSOR, ONT.—Major Laura Clarke, of Toronto, has been appointed successor to Major Robina Macauley who recently retired from the superintendency of Grace Hospital. Major Clarke has been an officer of the Salvation Army for the past 25 years, recently holding the position of second in command of all the women's social activities in the Army in Canada East and Newfoundland. She has also been in charge of hospitals in St. John, N.B. and Halifax, N.S. In 1922 Grace Hospital, Halifax, was opened under her direction.

News of Hospitals and Staffs

A Condensed Monthly Summary of Hospital Activities, and Personal News of Hospital Workers

Editor's Note: Contributions of items for publication in this department will be gladly received. Please Address, The Canadian Hospital, 177 Jarvis Street, Toronto.

FREDERICTON, N.B.—Erection of a new Nurses' Residence at Victoria Hospital to cost $50,000 was suggested recently by representatives of the Hospital Board. It is suggested that the present Nurses' Residence could be used as an isolation unit if the new Residence were to be built.

* * *

FREDERICTON, N.B.—By the Bill entitled "an Act in aid of hospitals, tuberculosis aid and charitable institutions" introduced by the Provincial Secretary-Treasurer, a tax of five per cent is to be imposed upon the price of each meal costing one dollar or more served to the public in a hotel, restaurant or other place serving meals. Every meal check will contain the words "Hospital Duty" with the duty opposite. The duty will be paid by the consumer of the meal, the proceeds to be applied solely toward hospitals, tuberculosis aid and charitable institutions.

* * *

INGERSOLL, ONT.—The municipal hospital has granted $2,000 toward a Nurses' Residence in connection with the Alexandra Hospital. The proposed home will cost approximately $10,000.

* * *

KENTVILLE, N.S.—Plans for the new Infirmary at the Nova Scotia Sanatorium have been finally completed. The new building will be of fireproof construction and modern in every way. It is expected that the new addition will accommodate eighty patients.

* * *

LONDON, ONT.—The Kiwanis Club will donate to the new wing of St. Joseph's Hospital complete equipment for a children's ward, and according to reports the ward will be one of the finest of its kind in the Dominion. Approximately $1,000 will be spent for beds, furniture and therapeutic equipment.

* * *

LONDON, ONT.—Some idea of the magnitude of the work being done at the Queen Alexandra Sanatorium, of which Dr. F. H. Pratten is Medical Superintendent, may be gleaned from the twentieth annual report of the institution. The report shows that salaries and wages amount to nearly $150,000, and that land, equipment, buildings, plant and furniture are valued at over one million dollars.

* * *

MONTREAL, P.Q.—Almost at the same hour two fires broke out in hospital premises in Montreal on March 27th, and considerable damage resulted in each instance. One fire occurred in the nurses' residence of the St. Luc Hospital, where 35 nurses were forced out of their rooms. It is expected that the building can be renovated and made habitable again. The fire originated in a dumb waiter shaft and spread through the walls and ceilings. The other fire was on the premises of the Soeurs de la Providence, attached to the Hospital St. Jean de Dieu in Longue Pointe. It originated in a woodworking shop owned by the order and was fought immediately by the small fire brigade maintained at the hospital. The damage is reported as considerable.

* * *

ORILLIA, ONT.—Dr. B. T. McGhie, formerly of the Ontario Hospital, spent the Easter holidays with the new superintendent, Dr. S. J. W. Horne, at which time the staff and employees of the institution presented Dr. McGhie with a handsome set of entree dishes as a sign of

their regard and their good wishes for his happiness in his new position.

* * *

OTTAWA, ONT.—Owing to insufficient accommodation in its present quarters, the question of building an addition to St. Vincent Hospital for Incurables has become a necessity, according to Rev. Sister St. Firmin of the Gray Nuns of the Cross, who is Mother Superior of the institution. Four tentative sites are now being considered.

* * *

PETERBORO, ONT.—When the Nicholls Hospital gets its proposed new wing the Peter Robinson Chapter of the I.O.D.E. plans to contribute $1,000 toward it. The Chapter has already given $500 toward the equipment for a fracture room, and its activities in this direction have made for a very commendable community effort.

* * *

PICTOU, N.S.—Announcement has been made by the treasurer of the board of the Sutherland Memorial Hospital of a gift of $10,000 to the hospital by an anonymous donour. The money has been placed in trust for the hospital and the income, amounting to approximately $500 per year, is to be used for maintenance expenses.

* * *

SUDBURY, ONT.—With a large crowd in attendance the formal opening of the new wing of St. Joseph's Hospital took place on March 19th, with His Lordship, Rt. Rev. D. J. Scollard of North Bay, Bishop of the Sault Ste. Marie diocese officiating. Dr. J. R. Hurtubise, M.P., head of the hospital staff acted as chairman for the brief program of addresses which were given in the Solarium on the main floor.

* * *

THE PAS, MANITOBA.—An official medical staff of St. Anthony's Hospital with Dr. R. D. Orok as President, was formed at a recent organization meeting held at the Hospital with Rev. Father Marchand, Rector and Chaplain of the institution, in the chair. Dr. H. H. Elliott was appointed lecturer of the staff. With the formation of the medical staff St. Anthony's Hospital will become a Class A institution, having the necessary equipment and facilities to be entered as such on the roll of the American College of Surgeons.

* * *

TORONTO, ONT.—The story which appeared in the Toronto press relative to the use of Respirator apparatus in a Canadian hospital for the first time, resulted in the superintendent of the Hospital for Sick Children receiving three calls from citizens who wished to purchase similar apparatus for the hospital.

* * *

TORONTO, ONT.—Private Bills Committee gave unanimous approval of a bill authorizing the creation of an honorary board to act in an advisory capacity with the Board of Governors of the Toronto General Hospital. The honorary board will be limited to ten members and only persons who have served at least five years as a trustee of the Board of Governors will be eligible for appointment.

Important Advances Have Been Made in Hospital Lighting

(Continued from page 34)

without ornamentation.

(b) Local lights over the beds, additional to the general system, are necessary. These should be of a character which will permit the patients to read or pass the time at other occupations requiring close vision and without eyestrain. It is also frequently necessary for the doctors or nurses to attend a patient at night, and they may need a high intensity of illumination for the use of instruments, etc.

Fig. 1.
This type of unit makes a very suitable fixture for the lobby.

One type of wall bracket fixture which reduces wiring costs and is very desirable, combines the light and an extra receptacle in the same base. The importance of providing an extra receptacle cannot be over-emphasized.

(c) All hospitals require the lights in wards to be extinguished after a certain hour; but night lighting with special fixtures is necessary to enable the nurse or others to move about with ease and exercise the necessary supervision.

Probably the most desirable method of providing the night lighting is through the use of low-wattage lamps in fixtures sunk flush in the wall a foot or two from the floor. This unit has the advantage of being quite below the line of sight of a patient desirous of sleeping, for almost all the light is thrown on the floor where it is needed.

Another method is the use of low-wattage lamps in the ceiling fixtures for general illumination. These are wired

on a separate circuit and are kept burning when the other lamps are out.

(d) Special lighting for the nurse's desk, medicine cabinet, etc., can be provided by a portable desk light for the night nurse, and a drop light with rather dense translucent reflector suspended over the glass top of the medicine cabinet.

Operating Rooms

The lighting requirements discussed thus far do not differ materially from those ordinarily encountered. In the surgery, however, very special demands exist as to lighting.

Although the majority of serious operations are performed by daylight, daylight itself varies so much through the seasons and the time of day, that good artificial lighting is an absolute essential in the modern operating room for both day or night operations.

An extremely high intensity of illumination is, therefore, required, so that the minutest details may be easily distinguishable. The character of diffusion of the light is as important a factor as the intensity. Shadows may lead to serious difficulties in certain types of operations. Furthermore, the light must come from many directions, so that the surgeon is never working in his own shadow, and so that any incision is illumined perfectly. In cases where horizontal lighting is necessary for penetration, special portable equipment must be installed.

We are accustomed to very high intensities of daylight, and it is found that by increasing the illumination in the operating room the surgeon works with greater facility. If ever good and plentiful light is required, it is in the operating room. A strong, constant intensity of illumination is absolutely necessary. If, for some reason, the electrical supply fails, the room will be in darkness unless an emergency system is available. A small storage battery of sufficient capacity to light the operating room for a given period of time, is most essential. By throwing a switch, such an installation may take care of an

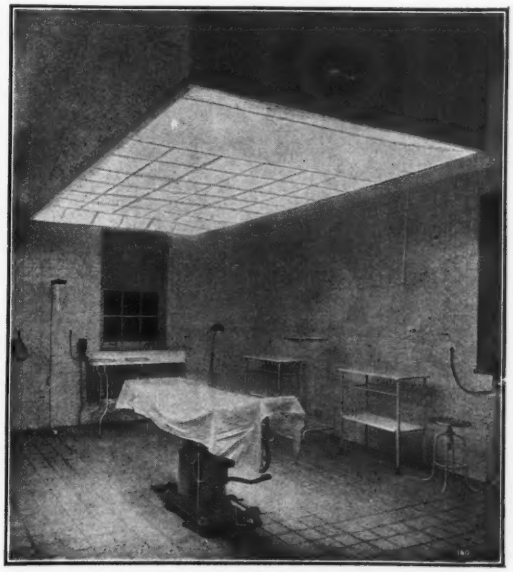


Fig. 4.
Prismatic glass lens unit for major operating rooms in large hospitals.

emergency. A better arrangement is to have the storage battery circuit thrown in automatically when the regular system is put out of commission.

A surgery lighting unit such as that shown in Fig. 4 has many desirable features. It consists of a series of prismatic glass lenses mounted in a frame suspended from the ceiling, or mounted flush with the ceiling and accupying seventy-two square feet. Behind each lens is a lamp, and the individual plates combine to make one huge lens that focusses on the operating table. The assembled unit consists of reflector, lamp, and lens in such relation to each other that the maximum beam strikes the centre of the operating table. The "spot" has necessarily an area larger than the wound. The overflow from the lens takes care of the general field illumination. The lenses are sufficiently thick to absorb most of the heat, while the number of lamps used makes a lamp burn-out unimportant when compared to those units which utilize one single lamp.

With the prismatic glass lens system, the intensity is sufficiently high to approximate natural daylight intensities; while the light comes from so many directions that the shadows cast by the surgeon are not troublesome.

Another good system which is very similar, utilizes concentrated-beam mirrored glass reflectors recessed in the ceiling, throwing the light through slightly frosted heat-resisting glass onto the operating table.

For the smaller hospital, which for economic reasons cannot purchase such a unit as the above, the prismatic glass one-light lens unit is to be recommended. Five of these units surpended at points above the operating table will give an excellent diffusion, and quite a high intensity on the operating table. The central unit will throw the light directly down on the table, while the other four will be of the angular type which will throw the light onto the operating table at four different angles. This type of unit is shown in Fig. 5.

In the past, a surgery lighting device had to be moved

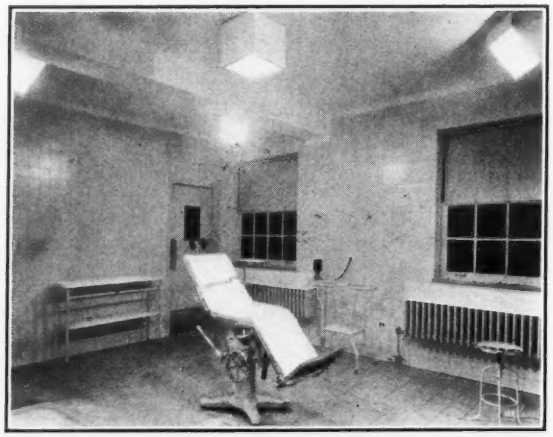


Fig. 5.
This type of unit is eminently suited to the operating room in the smaller hospital.

to change the direction of the light on the wound. The new method permits the light pattern to be varied to suit different surgical conditions without manipulating cumbrous mechanisms. The light is moved instead of the fixture, by means of switches.

Well-Being of Both Patients and Staff Considered at Wolfville Institution

(Continued from page 32)

nurses' dining room. Chintz curtains and chintz patterned china contribute immeasureably to the cheeriness of this room. A definite attempt has been made to make the nurses' quarters as homelike and attractive as possible so that their hours off duty may be spent in an atmosphere as little suggestive of the hospital as possible—a difficult thing to do when the nurses' quarters are on the hospital premises.

The hospital has a small laboratory for routine work. The sterilizing room has a 10 gallon still, a dressing sterilizer and an autoclave. A doctors' scrub up room with knee action sink is adjacent to the operative suite.

All patients are housed on the second floor. There are five private rooms in different colour schemes, all with hot and cold running water. Two have adjoining bathrooms. Semi-private rooms are three in number, one accommodating three, the others two patients each. There is a men's ward, a women's ward and a maternity ward, a delivery room and nursery on this floor. The nursery is Vita Glass enclosed and gets the sun all day. The sun porch is utilized as a children's ward and is completely equipped with cream coloured children's furniture. The nursery boasts a cream and blue colour scheme and houses five infants. There are also a Diet Kitchen, Linen Room and Utility Room on the second floor, the latter located between the men's and women's wards and equipped with an Orbit bed pan washer.

Miss Bengston believes that the hospital of which she is the superintendent is the first to utilize cubicle curtains, which she finds excellent as a means of providing privacy for public patients. The Northern Electric Company supplied the light and electric bell system. There are repeat lights in the nursery and utility room, nurses' dining room, operating room and diet kitchen. There are also three emergency bells, one in each wing and one centre. This rings all over the hospital and also in the superintendent's suite, thereby protecting the night nurse at all times while she is alone on duty. The different wings are separated by swinging doors. All doors have hook handles and have no panels, being made in one piece.

The walls and ceilings have been treated with Celotex and a new kind of sea grass now in extensive use, to insure the minimum of noise reaching the patients. Eight interconnecting telephones provide immediate communication with the various departments.

The maids' quarters are in the basement, and comprise bedrooms and a sitting room. Telephone connection is maintained with the rest of the hospital. In the basement also are the janitor's room, isolation room, laundry, morgue, X-Ray room, night nurse's bedroom, storage facilities, vegetable cellar and furnace room.

The nurses' quarters are built and fitted up exactly as the private wing, so that if at any time more space is required for patients, the nurses may be moved into a home of their own, and the patients moved in without any additional cost other than the necessary furniture. The superintendent's suite is, of course, permanent, but the extra wing would yield space for six more beds with a sunroom adjacent.

The cost of the Eastern Kings Memorial Hospital, including $5,000 interest under a 3-year plan, was $102,000, of which $90,000 has been pledged. Of this sum $55,000 has already been collected.

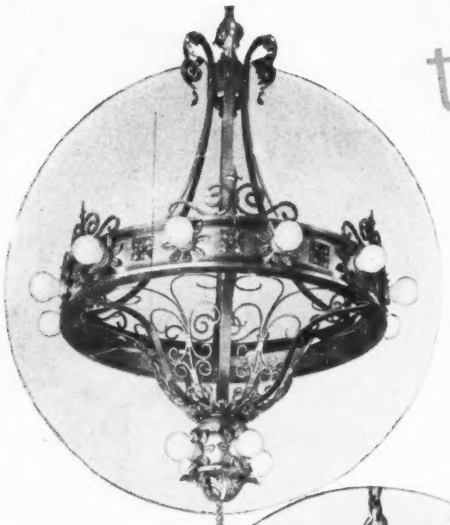
The hospital does its own laundry with the exception of sheets, bedspreads and uniforms. The laundry is equipped with an electric washer and ironer, the latter handling 500 pieces in 1¼ hours.

A flat rate of $35.00 for two weeks is charged public maternity patients, $55.00 for semi-private, and from $70.00 up for private patients. There are no extras; these flat rates are all-inclusive. The public maternity rate of $35.00 for two weeks is payable in advance.

The staff includes six nurses, three maids and a man who cares for the furnace and does odd jobs in return for his room and board. The nurses are all graduate maternities and 3-year graduates, and there is no training school. Miss Viva Bengtson is superintendent and Miss Edna Redden is her assistant.

Index to Advertisers

FIXTURES in the NEW WING of the KINGSTON GENERAL HOSPITAL



Installed by

THE CONTRACT DEPARTMENT
Sixth Floor
EATON'S-COLLEGE STREET

Fixtures throughout the new wing are just one item of many which Eaton's Contract Department supplied to the Kingston General Hospital —an item of much importance since many of them are specially designed—of these we illustrate three: the lanterns of hand wrought iron on either side of the Main Entrance; the 16-light pendant of scrolled bronze in the Main Foyer; and the 5-light pendants with oxidized silver in the Reception Rooms.

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